

REMARKS

In the office action, claims 1 - 11 were allowed, claim 15 was objected to, claim 12 was rejected under 35 U.S.C. §102 over U.S. Patent No. 3,934,213 to Stuckert, and claims 13 - 14 were rejected under 35 U.S.C. §103 over Stuckert.

Responsive to the office action, claim 12 has been amended, claim 15 has been canceled, and new claims 16 - 21 have been added. Claim 16 includes the limitations of claim 12 (prior to the amendment) and claim 15, which was objected to but indicated as being allowable is re-written in independent form.

The Stuckert reference discloses a directional coupler that detects signals propagating in opposite directions on a signal path or transmission line. The detection circuits of Stuckert seek to reduce the impact on the signal in the signal path. The transformers shown in Figure 3 are used to *subtract* two signal from each other in order to obtain an attenuated version of the signals in the signal path. This subtraction may be seen diagrammatically by the opposing placement of the dots in the N_1 transformers shown in Figure 3.

Applicants' power amplifier circuits, on the other hand, involve *summing* the power from each primary transformer winding, not subtracting the power from the primary transformer winding from one another. This may be seen diagrammatically in applicants' Figure 2 by the placement of the dots in transformer windings 26, 28 and 30.

Claim 12 has been amended to further require "at least one amplifier that includes an input that is coupled to a system input port and includes an output that is coupled to at least one of said plurality of m primary transformer windings". The Stuckert reference does not disclose or teach or suggest the use of at least one amplifier in connection with the primary transformer windings.

Claim 17 requires, in part, "power amplifier circuitry that couples said first and second primary transformer windings and said second transformer winding such that said first and second positive directions are the same with respect to said secondary transformer winding, providing a summation of said first and

second currents at said secondary transformer winding". Again, the Stuckert references does not disclose, teach or suggest such circuitry since it is an object of the detection circuit of Stuckert to obtain the *difference* between the two signals and minimize the impact on the signal in the signal path. Each of new claims 18, 20 and 21 depends from and further limits the subject matter of claim 1, and new claim 19 depends from and further limits the subject matter of claim 12.

Applicant submits, therefore, that each of claims 1 - 14 and 16 - 21 is in condition for allowance. Favorable action consistent with the above is respectfully requested.

Respectfully submitted,



William E. Hilton
Registration No. 35,192
Samuels, Gauthier & Stevens, LLP
225 Franklin Street, Suite 3300
Boston, Massachusetts 02110
Telephone: (617) 426-9180
Extension: 111